

REMARKS/ARGUMENTS

Status of Application

Claims 24-54 are pending. Claims 1-23 were previously canceled in view of an earlier restriction requirement; and claims 55-57 are being canceled herewith in view of a further restriction requirement. Claims 24-40 have been allowed, and Applicants gratefully acknowledge such allowance.

Claims 41-54 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over prior art including Sato (JP 6-199016), Nakajima (JP 5-64926) Ogg et al. (U.S. Patent No. 6,965,451), and Sasai et al. (JP 10-211747). Applicants respectfully submit that the references do not fairly disclose or suggest the claimed invention, and respectfully request that the Examiner reconsider and withdraw the prior art rejection.

Second Restriction Requirement and Election

Applicants hereby confirm the previous telephone election, without traverse, to prosecute claims 24-54. Claims 55-57, drawn to a non-elected invention, are hereby canceled without prejudice to possible prosecution in a continuing application.

The Prior Art Rejection

The pending claims have been rejected under 35 U.S.C. § 103(a) for obviousness as follows:

- Claims 41 and 51-52 over Sato in view of Nakajima;
- Claims 42-44 over Sato in view of Nakajima, and further in view of Ogg; and
- Claims 45, 48-49 and 53-54 over Sato in view of Nakajima, and further in view of Sasai.

For the reasons discussed below, Applicants respectfully submit that:

- Sato and Sasai address an entirely different problem than the claimed invention, and do not deal with orientation of inserted paper or the possible re-insertion of paper in a different orientation; and

- Nakijima, while dealing with paper orientation, is addressing a different problem than Sato and Sasai, and there would be no motivation to combine the teachings.

The Cited Prior Art

Sato, as best can be understood, addresses the problem of getting a printhead rectilinearly aligned with tractor-fed (pin-fed) forms. The paper form stock is pre-printed with a number of delineated test frames, and when a test pattern is printed, the position of the printed character(s) relative to the test frame(s) provides information for making physical adjustments to the printer.

Nakajima, as best can be understood, addresses a completely different problem from the problem addressed by Sato, namely the user using inserting the paper in the wrong orientation. Nakajima uses photodetectors to determine the length and width of paper that is fed into a printer, and compares the result with expected values. The system prompts the user to change the paper feed direction if the measured values differ from the expected values. There is nothing dealing with the possibility of paper having been put in upside down, since for plain paper that would not be a problem.

Sasai, as best can be understood, also addresses the problem addressed by Sato, namely that of getting a printhead rectilinearly aligned with tractor-fed forms. The forms are provided with one or more test rectangular test frames, and test marks are printed. The user adjusts print head depending on the location of the test marks relative to the test frame.

Ogg is cited as teaching “that it is known to print on label sheets (Ogg et al., col. 7, lines 11-13).”

The Cited Prior Art does not Disclose or Suggest the Claimed Invention

Claim 41 recites, among other things, “if the actual location does not correspond to the intended location, prompting the user to re-insert the printable medium into the printer in a second orientation.” In characterizing Sato vis-à-vis claim 41, the Examiner states that “Sato discloses that if the test mark Y is not printed correctly the position of the note in the printer is adjusted to repeat the printing of the test pattern. It would have been obvious to one of ordinary

skill in the art to reinsert the media, if needed, through routine experimentation of printing positions.”

Applicants respectfully disagree with this characterization of the references and the claim language. Consider first the issue of what Sato suggests regarding re-inserting the paper in response to a misprinted test pattern. The only possible reason for the user to deal with the paper is to deal with lack of registration along the direction of paper travel. It is not clear at all that the user in Sato would actually re-insert the paper; it would seem more likely that the user would adjust the tractor mechanism. While Nakajima would have the user re-insert the paper, it would not be in response to an improperly printed sheet, but rather from an error detected by the printer’s photodetectors.

Further, Sato is not even dealing with the paper’s orientation, but rather with its rectilinear position relative to the print head. The two types of improper orientation discussed in the specification are with the top and bottom surfaces interchanged, or with the leading and trailing edges interchanged. The former corresponds to a 180° rotation about an axis in the plane of the sheet; the latter to a 180° rotation about an axis perpendicular to the plane of the sheet.

The American Heritage Dictionary, Second College Edition, Copyright © 1982, 1985 by Houghton Mifflin Company (“the American Heritage® Dictionary”) includes the following relevant definitions for the term “orient”:

1. To locate or place in a particular relation to the points of the compass: *orient the swimming pool north and south.*
2. a. To locate or place so as to face the east. ...
3. To align or position with respect to a reference system.
4. To determine the bearings of: *He oriented himself by finding a familiar landmark.*

The same dictionary includes the following relevant definitions for the term “orientation”:

1. The act of orienting or the state of being oriented.
2. Location or position relative to the points of the compass.

Thus the dictionary definitions, while not dispositive of the interpretation of the term “orientation,” are entirely consistent with Applicants’ use of the term in the claim.

Applicants submit Sato’s technique for adjusting rectilinear alignment does not deal with orientation as that term is used in the claims, and is addressing a completely different problem. While Nakajima could be argued to deal with detecting orientation of paper inserted

into a printer, it does so in a very different way, and there is no suggestion in the prior art to combine it with Sato. It is not clear that Sasai adds anything to the teachings of Sato.

Therefore, claim 41 is believed to be allowable over the prior art. The comments above with respect to claim 41 apply equally to independent claims 44, 45, 50, 51, 52, 53, and 54. Therefore, these claims are believed allowable for the same reasons.

Dependent claims 42-43 and 46-49 depend from claims that are believed allowable, and are therefore allowable for at least that reason.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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Attachments

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